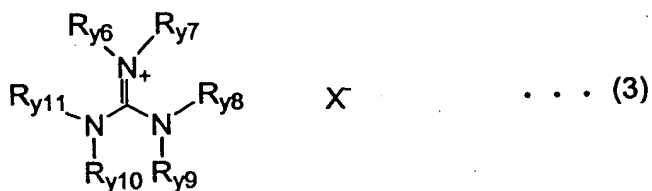
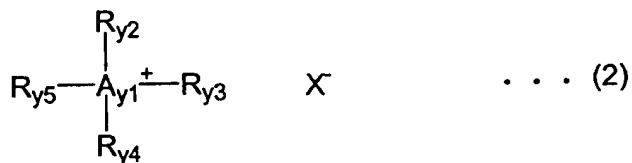
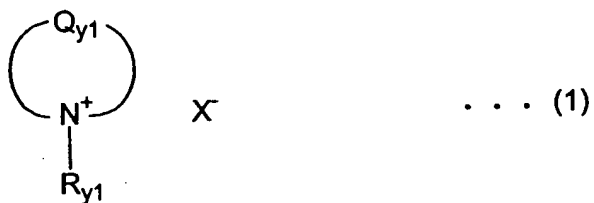


AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended). An electrolyte composition comprising: a molten salt represented by any of the following general formulae (1), (2) and (3); a cross-linked polymer cross-linked by an atomic group having a substructure -C-C-hetero atom- at two or more positions adjacent to an electron-withdrawing group, said hetero atom being at least one atom selected from the group consisting of S, N, and O prepared by a reaction between an electrophile having at least two unsaturated bonds polarized by an said electron-withdrawing group and a nucleophile having a plurality of nucleophilic groups; and a metal salt containing a Group IA metal ion or a Group IIA metal ion



wherein, in general formulae (1), (2) and (3), Q_{y1} represents an atomic group forming an aromatic cation having a 5- or 6-membered ring structure with the nitrogen atom, A_{y1} represents a nitrogen atom or a phosphorus atom, R_{y1} to R_{y11} independently represent a substituted or unsubstituted alkyl group or a substituted or unsubstituted alkenyl group, X⁻ represents an anion, two or more of R_{y2} to R_{y5} in the general formula (2) optionally bond together to form a non-aromatic ring containing A_{y1}, and two or more of R_{y6} to R_{y11}, in the general formula (3) optionally bond together to form a ring.

2. (original). The electrolyte composition according to claim 1, wherein said Q_{y1} is composed of atoms selected from the group consisting of carbon, hydrogen, nitrogen, oxygen and sulfur atoms.

3. (original). The electrolyte composition according to claim 1, wherein said aromatic cation formed by said Q is an imidazolium cation or a pyridinium cation.

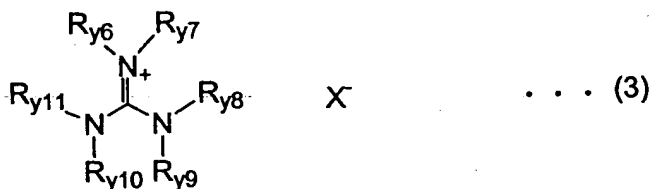
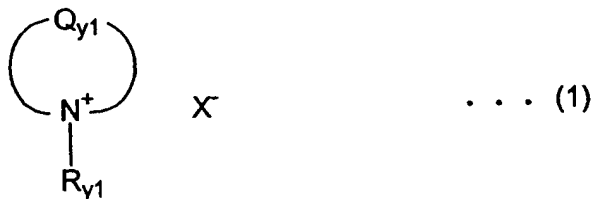
4. (original). The electrolyte composition according to claim 1, wherein said electron-withdrawing group is selected from the group consisting of a sulfonyl group, a cyano group and a carbonyl group.

5. (original). The electrolyte composition according to claim 1, wherein said nucleophilic groups are selected from the group consisting of $-NH_2$, $-SH$, $-S^-$, $-SO_2H$ and $-SO_2^-$.

6. (original). A non-aqueous electrolyte secondary cell comprising the electrolyte composition recited in claim 1.

7 (currently amended): A process for manufacturing ~~the electrolyte composition of claim 1~~ an electrolyte composition comprising: a molten salt represented by any of the following general formulae (1), (2) and (3); a polymer prepared by a reaction between an electrophile having at least two unsaturated bonds polarized by an electron-withdrawing group and a

nucleophile having a plurality of nucleophilic groups; and a metal salt containing a Group IA metal ion or a Group IIA metal ion



wherein, in general formulae (1), (2) and (3), Q_{y1} represents an atomic group forming an aromatic cation having a 5- or 6-membered ring structure with the nitrogen atom, A_{y1} represents a nitrogen atom or a phosphorus atom, R_{y1} to R_{y11} independently represent a substituted or unsubstituted alkyl group or a substituted or unsubstituted alkenyl group, X⁻ represents an anion, two or more of R_{y2} to R_{y5} in the general formula (2) optionally bond together to form a non-aromatic ring containing A_{y1}, and two or more of R_{y6} to R_{y11} in the general formula (3)

optionally bond together to form a ring, which process comprises adding an electrophile and a nucleophile to ~~the~~ said molten salt ~~of claim 1~~, and reacting the electrophile and the nucleophile by a Michael-type addition reaction to thereby form a cross-linked polymer, wherein the electrophile has at least two polarized unsaturated bonds polarized by an electron-withdrawing group and the nucleophile has a plurality of nucleophilic groups, wherein the nucleophilic groups are selected from the class consisting of -NH₂, -SH, -S⁻, -SO₂H, -SO₂⁻, -OH and -COOH.